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200,264 COMPLETE SPECIFICATION

SHEET

[This Drawing is a reproduction of the Original on a reduced scale]

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Fig. 1

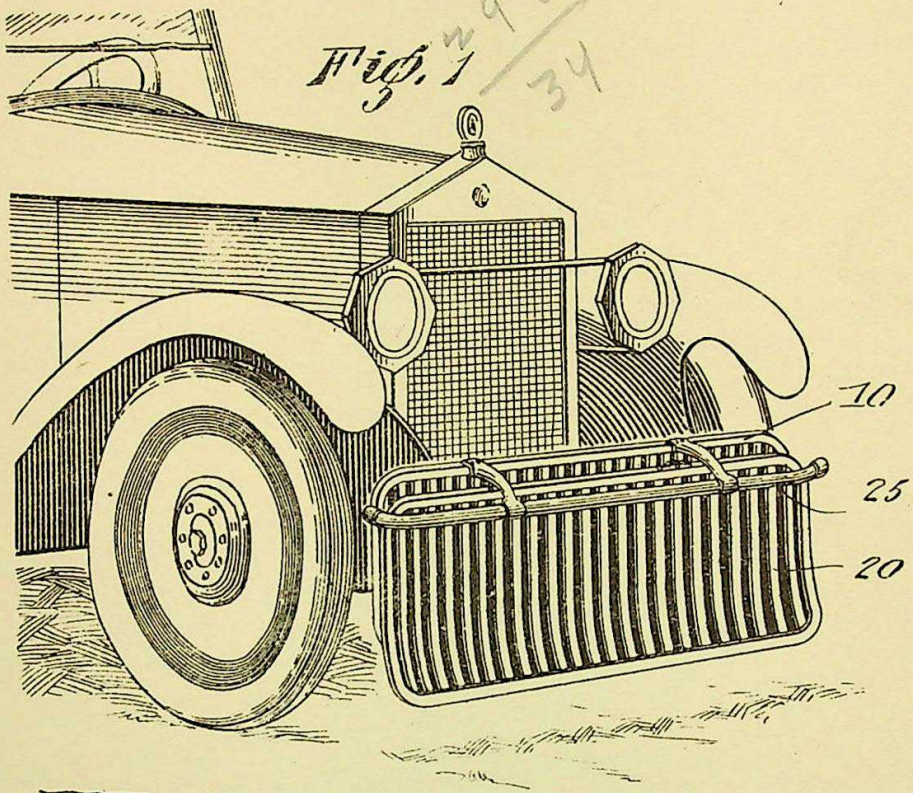

Fig. 2

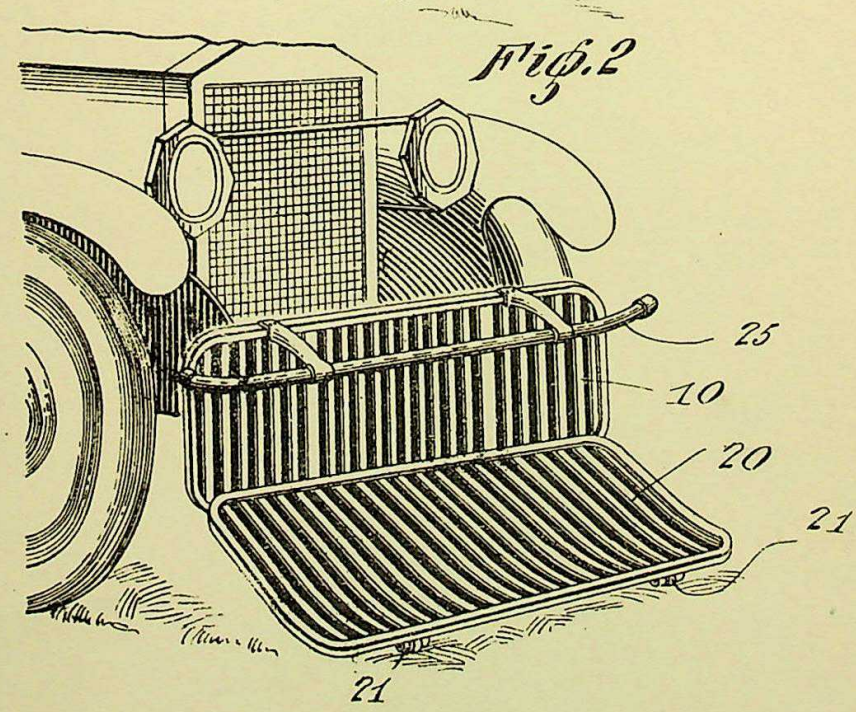

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Fig. 3

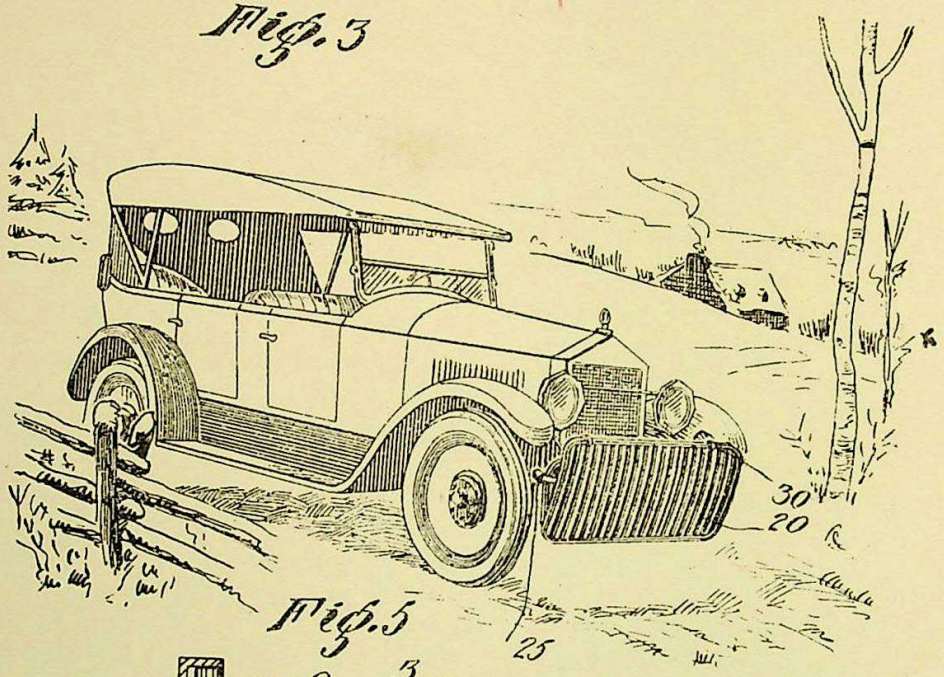

Fig. 5

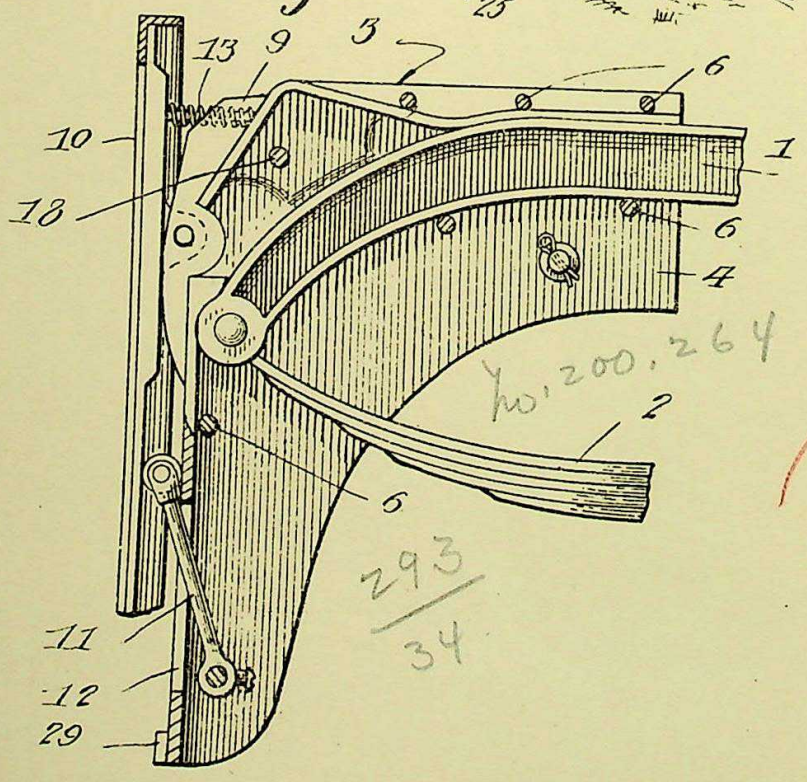

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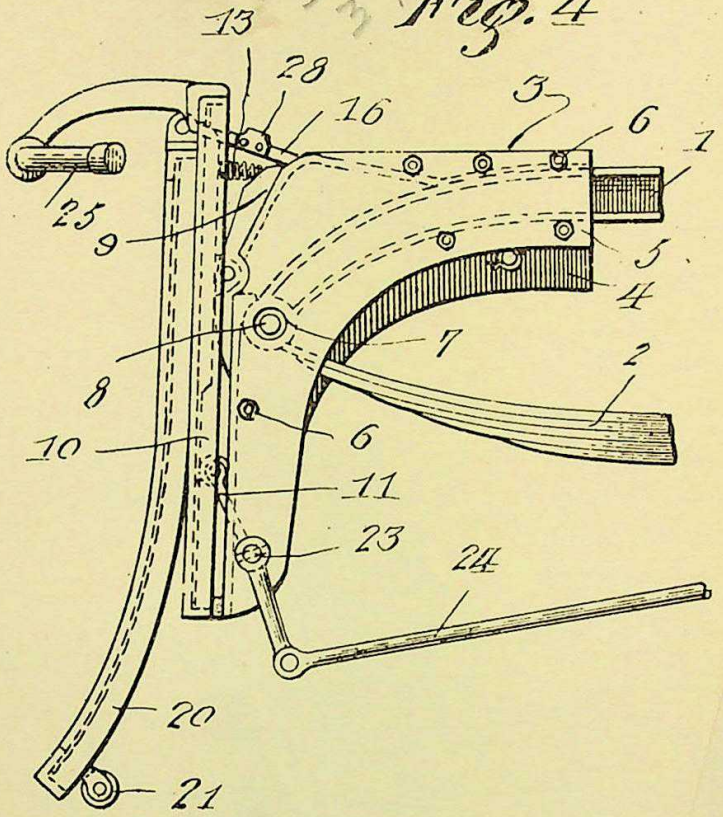
Fig. 4



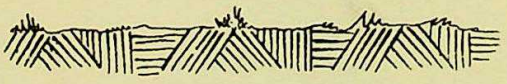


Fig. 11

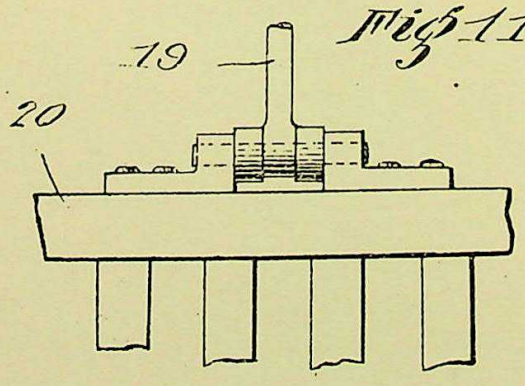


Fig. 13

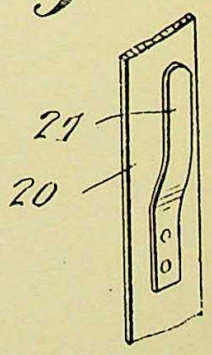


Fig. 14

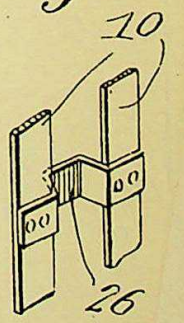


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Fig. 6

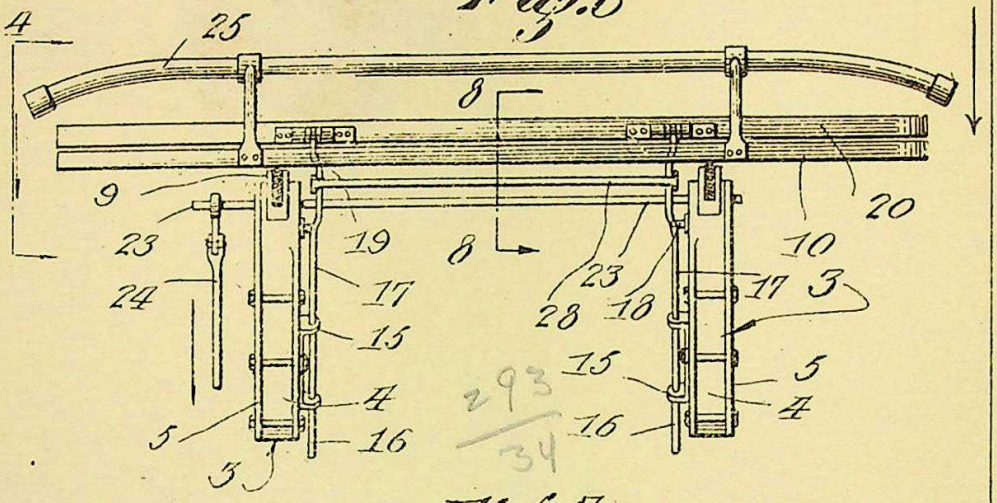

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Fig. 7

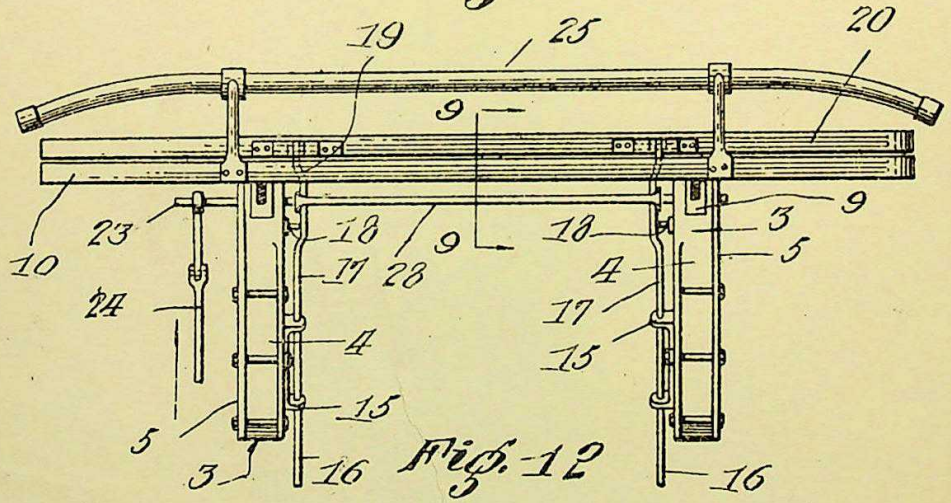
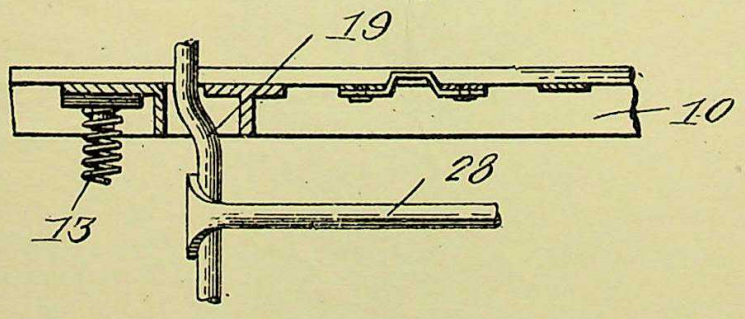


Fig. 12



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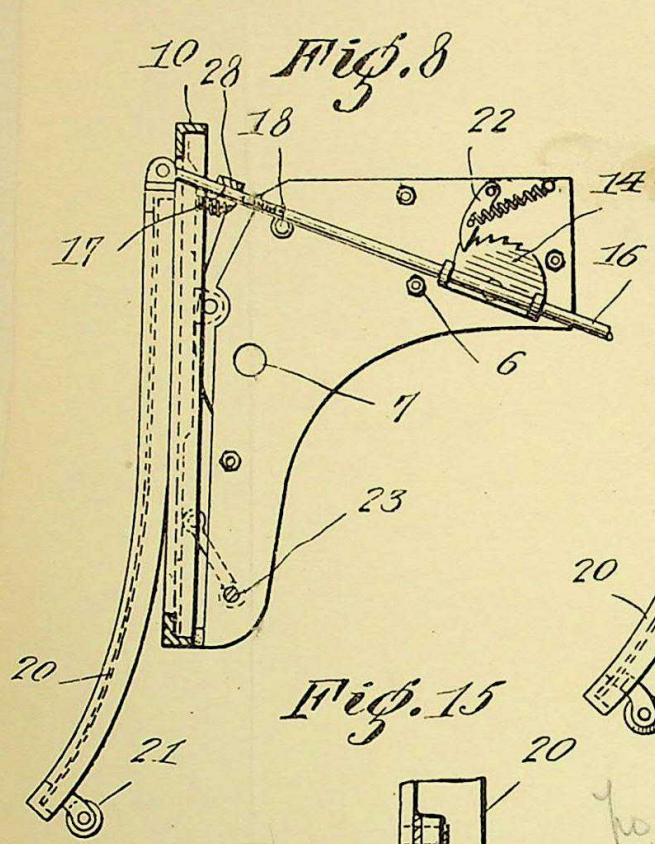


Fig. 8

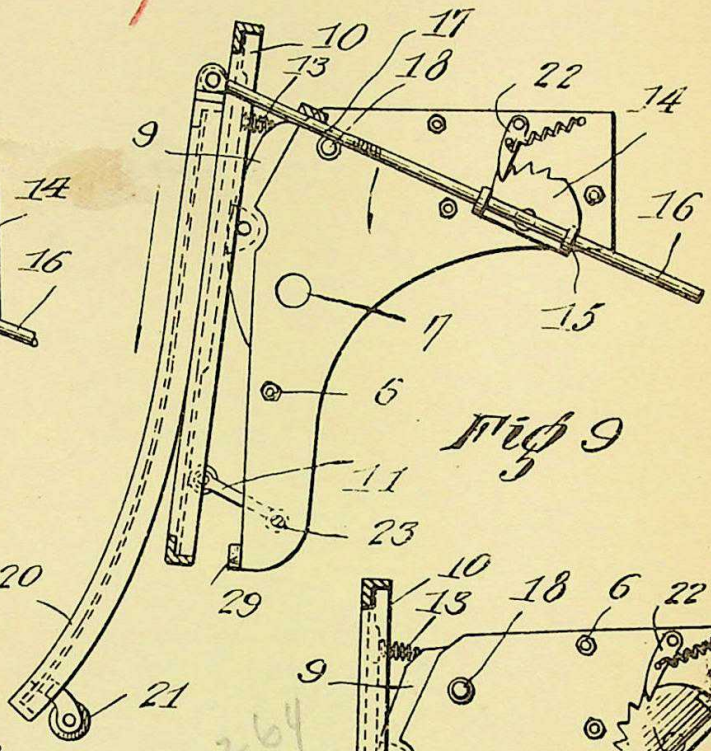


Fig 9

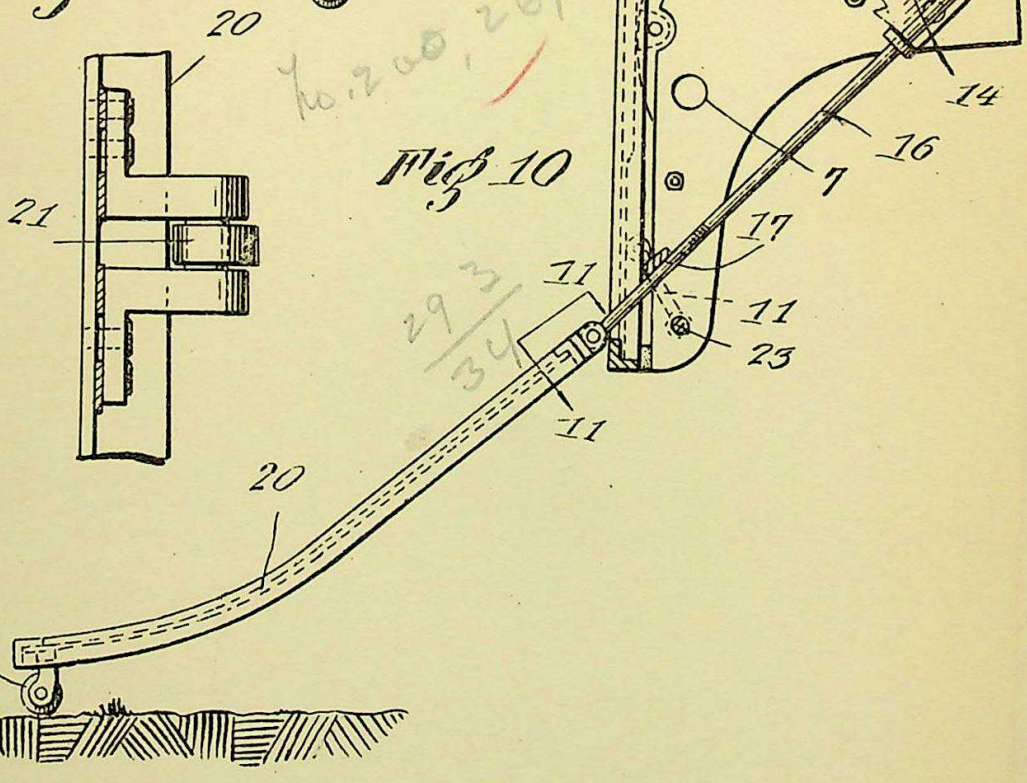
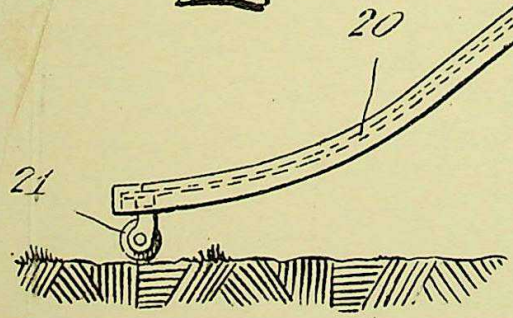


Fig. 15

Fig 10



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PATENT SPECIFICATION

200,264

Application Date: April 28, 1922. No. 11,898/22.

Complete Accepted: July 12, 1923.

COMPLETE SPECIFICATION.

Improvements in or relating to Fenders or Obstruction Removers for Vehicles.

We, RALPH MAYNE READE, Superintendent Quebec Railway, 13, Dolbeau Street, Quebec, and PETER JOSEPH QUINN, Master Mechanic Quebec Railway, 50, Sounder Street, Quebec, both British subjects, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to a new and useful fender or obstruction remover, particularly adapted for use in conjunction with an automobile or similar vehicle, and more particularly of the kind wherein a movable fender slides from a substantially vertical inoperative position to an inclined or substantially horizontal operative position along a suitable guide member.

One object of the invention is the provision of a device of the character indicated above that can be automatically actuated either from the driver's seat or by a blow on the fender.

Another object is to provide a fender of the character indicated above which, when brought into operative position, cannot be returned to inoperative position without the vehicle being stopped, thus preventing the escape of the vehicle after an accident has occurred.

Hitherto in devices of this character the guide member has been stationary on the vehicle, but, according to the present invention the guide member is pivoted, the pivotal movement of which is adapted to cause the movement of the fender from its inoperative to its operative position.

A preferred embodiment is shown in the accompanying drawings in which:—

Figure 1 shows the device in inoperative position.

Figure 2 is a similar view showing the fender in operative position;

[*Price* 1/-]

Figure 3 is a perspective view showing the fender locked in inoperative position;

Figure 4 is a side elevation, substantially on the line 4—4 of Figure 6;

Figure 5 is a similar view, showing the interior construction of the bracket;

Figure 6 is a plan of the device in inoperative position;

Figure 7 is a similar view showing the fender released and about to drop;

Figure 8 is a section on the line 8—8 of Figure 6;

Figure 9 is a section on the line 9—9 of Figure 7;

Figure 10 is a view corresponding to Figure 9, showing the fender in operative position;

Figure 11 is a section on the line 11—11 of Figure 10;

Figure 12 is a sectional detail view;

Figures 13 and 14 are details of the clamp members on the guide and fender; and,

Figure 15 is a detail of one of the rollers attached to the fender.

Referring to the accompanying drawings by reference characters, the numeral 1 indicates the goose neck of a vehicle frame to the forward end of which is attached a spring 2 in the usual manner. A bracket 3 which consists of a casing 4 and a cover plate 5 is secured to the goose neck by a number of bolts 6, the casing and cover being perforated as at 7 for the reception of the shackle bolt 8. The bracket has a forward projection 9 to which is pivotally mounted a back or guide member 10 for the fender, later to be described. A link 11 is pivoted to the bracket and guide and works in a slot 12 formed in the bracket. The upper portions of the bracket and frame have secured thereto a compression spring 13, the purpose of which is to maintain the lower portion of the

guide and members associated therewith under pressure towards the front of the vehicle. It will be understood that the arrangement already described is attached to each goose neck portion of the vehicle frame.

Each bracket has pivoted thereto on its inner face a ratchet member 14 having formed thereon bearings 15 in which is slidably supported a rod 16. The rear or inner portion of the rod is offset as at 17, which offset portion is adapted to rest on a pin 18 secured to the bracket. The other portion of the rod extends beyond the end of the pin, as clearly shown in Figure 6. These rods pass through the guide member 10 and are prevented from forward movement relatively thereto by the curved portion 19. The outer ends protrude through the guide, and a curved fender 20 is pivotally supported thereon. The lower end of the fender carries rollers 21 in the usual manner. A spring actuated pawl 22 is pivoted to the bracket for co-operation with the ratchet.

When the fender has been lowered and in order that it may again be raised, it will be necessary for the driver to bring the vehicle to a stop and to release the pawl 22 from the ratchet 14.

In order that the fender may be brought into downward position immediately upon the occurrence of an accident a buffing bar 25 of ordinary construction is secured to the guide member 10. A blow on this bar, in the direction of the arrows shown in Figure 6, causes a tilting movement of the guide about its pivot point, whereupon the offset portion 17 of the rod 16 is disengaged from the pin 18.

The guide member 10 may further be tilted about its pivotal point by the operation of the rod 24 connected by the pin 23 with the link 11 the rod 24, being operated from the driver's seat so that the fender may be lowered at the will of the driver.

The contacting faces of the guide and fender carry respectively sockets 26 and spring clips 27, Figures 13 and 14, respectively, the object of which is to prevent rattling of the guide and fender when the latter is raised.

A stay 28 is provided for joining the rods 16 in order to prevent undesired twisting or turning thereof. The lower ends of the bracket 3 carry cushions or rubber pads 29 in order to prevent jarring between the brackets and the guide. As a further auxiliary for the device, a plurality of hooks 30 Fig. 3, may be secured to some stationary part of the vehicle, such as the bracket 3 in order that the fender may be locked in inoperative position. It is to be noted in this connection that the rods 16 are of sufficient length to allow the fender to be positioned on the forward side of the bumper and slightly upwardly thereof, as clearly shown in Figure 3. The guard 20 is turned about the hinged connection with the rod 16, when in the position shewn in Fig. 10, in order to arrive at the locked inoperative position of the guard shewn in Fig. 3.

While a particular [illegible] of the invention has been [illegible]ted and described, it is to be understood that various details of construction may be altered or modified within the scope of the appended claims.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A fender or obstruction remover for vehicles having a movable fender and a guide member therefor in which the guide member is pivoted, the pivotal movement of which is adapted to cause the movement of the fender from a substantially vertical inoperative position to an inclined or substantially horizontal operative position, substantially as described.

2. A fender or obstruction remover as claimed in Claim 1 in which the pivotal guide member is provided with a buffing bar projecting forwardly from the upper portion thereof, substantially as described.

3. A fender or obstruction remover as claimed in Claims 1 and 2 in which the lower portion of the guide member is provided with a link pivotally mounted on a stationary part of the vehicle and adapted to be operated by a rod and link connection from the driver's seat to cause the pivotal movement of the guide member, substantially as described.

4. A fender or obstruction remover as claimed in Claim 1 in which the fender is held in its inoperative position by a plurality of rods having off set portions resting on stationary supporting studs and having a pivotal connection with the upper portion of the fender, substantially as described.

5. A fender or obstruction remover as claimed in Claims 1 and 4 in which the supporting rods are suitably curved to prevent forward movement of the rod relatively to the pivotal guide member so that on the pivotal movement of the latter the off set portions of the rod are withdrawn from the supporting studs to

allow the movement of the fender into its operative position, substantially as described.

6. A fender or obstruction remover as claimed in Claims 1 and 4 in which the supporting rod is slidably mounted within a pivotal support provided with a rack adapted to be engaged by a spring actuated pawl in order to allow the pivotal movement of the rod in one direction only without withdrawing the pawl from its operative position, substantially as described.

7. A fender or obstruction remover as claimed in Claim 1 in which a compression spring is provided between the frame and the guide member to hold the guide member in its forward position and thus retain the rod on the supporting studs, substantially as described.

8. A fender or obstruction remover as claimed in Claim 1 in which interengaging members are provided on the faces of the guide and fender to prevent rattling of the said members when the fender is in its raised position, substantially as described.

9. A fender or obstruction remover for vehicles constructed and arranged to operate substantially as described with reference to the accompanying drawings.

Dated this 27th day of April, 1922.

W. P. THOMPSON & Co.,
12, Church Street, Liverpool.
Chartered & Registered Patent Agents.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1923.